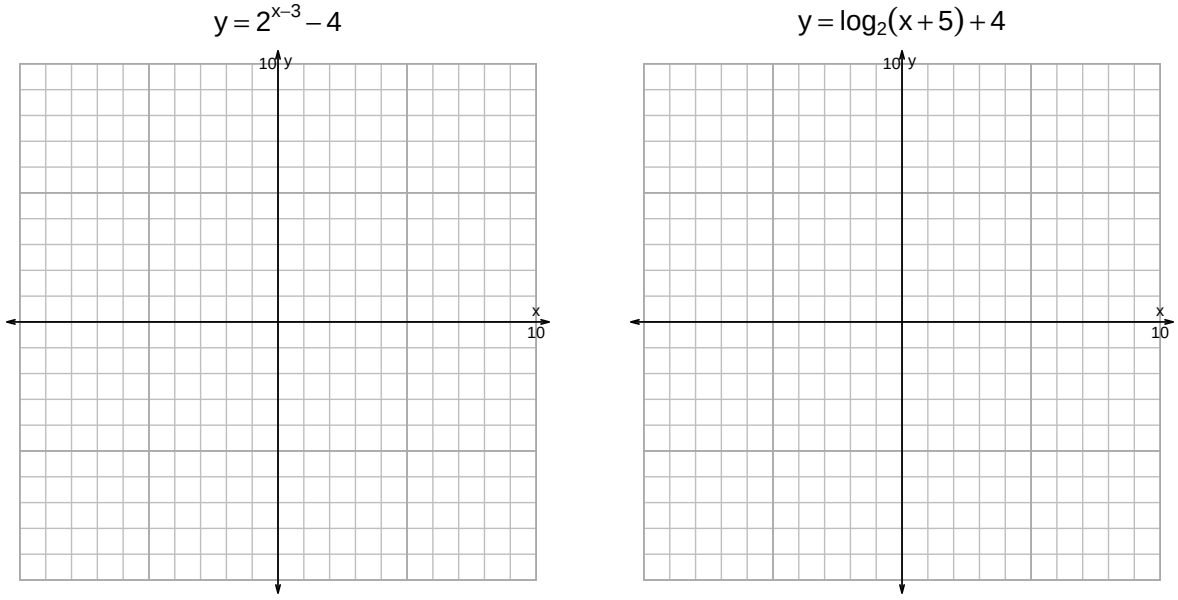
Name: Date:

S18QUIZ: EXP LOG (QUIZ V287)

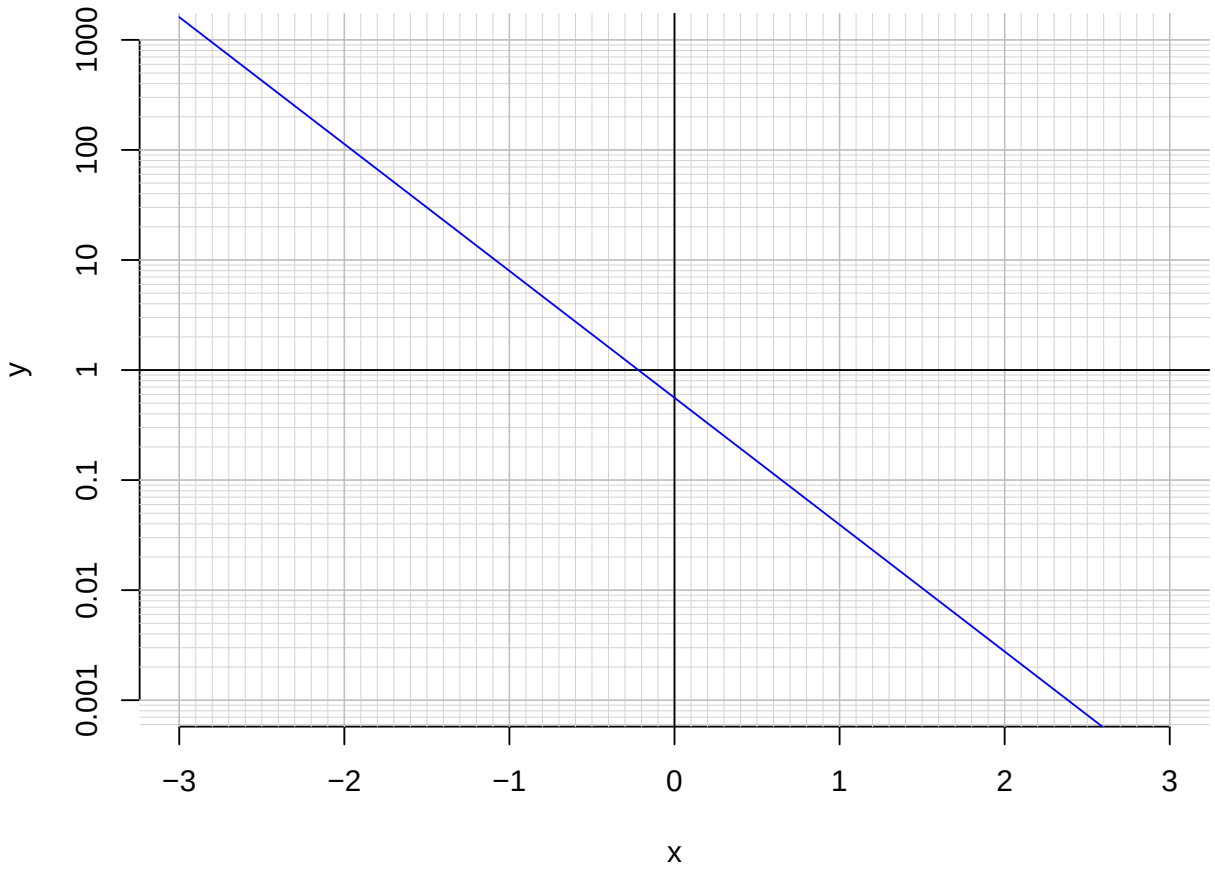
1. Graph $y = 2^{x-3} - 4$ and $y = \log_2(x+5) + 4$ on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$11 = \left(\frac{3}{4}\right) \cdot 2^{7t/5}$$

3. An exponential function $f(x) = 0.559 \cdot e^{-2.65x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate $f(-1.5)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(0.008)$.